|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Application No.        | Applicant(s)                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------------------|
| Notice of Allowability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 10/061,671             | FILIPPO, MICHAEL A.                               |
| Notice of Anowability                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Examiner               | Art Unit                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Albert Wang            | 2115                                              |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.                                                                               |                        |                                                   |
| 1. X This communication is responsive to <u>amendment after final filed 29 July 2005</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                                   |
| 2. The allowed claim(s) is/are 1 and 3-16.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                                   |
| 3. ☑ The drawings filed on <u>01 February 2002</u> are accepted by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                   |
| <ul> <li>4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>                                                                                               |                        |                                                   |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.                                                                                                                                                                                                                                                                                                                                                                                               |                        |                                                   |
| 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                   |
| <ul> <li>6. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.</li> <li>(a) including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached</li> <li>1) hereto or 2) to Paper No./Mail Date</li> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> </ul> |                        |                                                   |
| 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |                                                   |
| attached Examiner's comment regarding REQUIREMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        | CAL MATERIAL.                                     |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>. –</b>             |                                                   |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                        | Patent Application (PTO-152) v (PTO-413)          |
| 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Paper No./Mail D       | ate <u>20050804</u> .                             |
| Paper No./Mail Date  4. Examiner's Comment Regarding Requirement for Deposit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 8. ⊠ Examiner's Staten | nent of Reasons for Allowance                     |
| of Biological Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 9. Other               | IOMAS LEE<br>Y PATENT EXAMINER<br>DGY CENTER 2100 |

Application/Control Number: 10/061,671 Page 2

Art Unit: 2115

## **DETAILED ACTION**

1. This Office action is responsive to the amendment after final filed 29 July 2005.

2. Claims 1 and 3-16 are allowed.

3. Luca Benini and Giovanni De Micheli, "System-Level Power Optimization:

Techniques and Tools", ACM Transactions on Design Automation and of Electronic Systems, Vol. 5, No. 2, April 2000, teaches predicting if the activity of a power-managed

component will exceed a break-even time.

The following is an examiner's statement of reasons for allowance: the prior art of record does not teach or suggest, individually or in combination, an integrated circuit in which a first activity detector and power control unit monitors some or all of the input signals received by and output signals produced by a first one of a plurality of functional units to predict when the first functional unit will be inactive.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Pursuant to MPEP 606.01, the title has been changed to read:

-- CLOCK CONTROL OF FUNCTIONAL UNITS IN AN INTEGRATED
CIRCUIT BASED ON MONITORING UNIT SIGNALS TO PREDICT
INACTIVITY --

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Wang whose telephone number is 571-272-3669. The examiner can normally be reached on M-F (9:30 - 6:00).

Application/Control Number: 10/061,671 Page 3

Art Unit: 2115

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AW

THOMAS LEE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2100